



North Shore Gas Project Status and Scoping

Former North Plant MGP

October 2008

NORTH SHORE
GAS COMPANY
WAUKEGAN, ILLINOIS



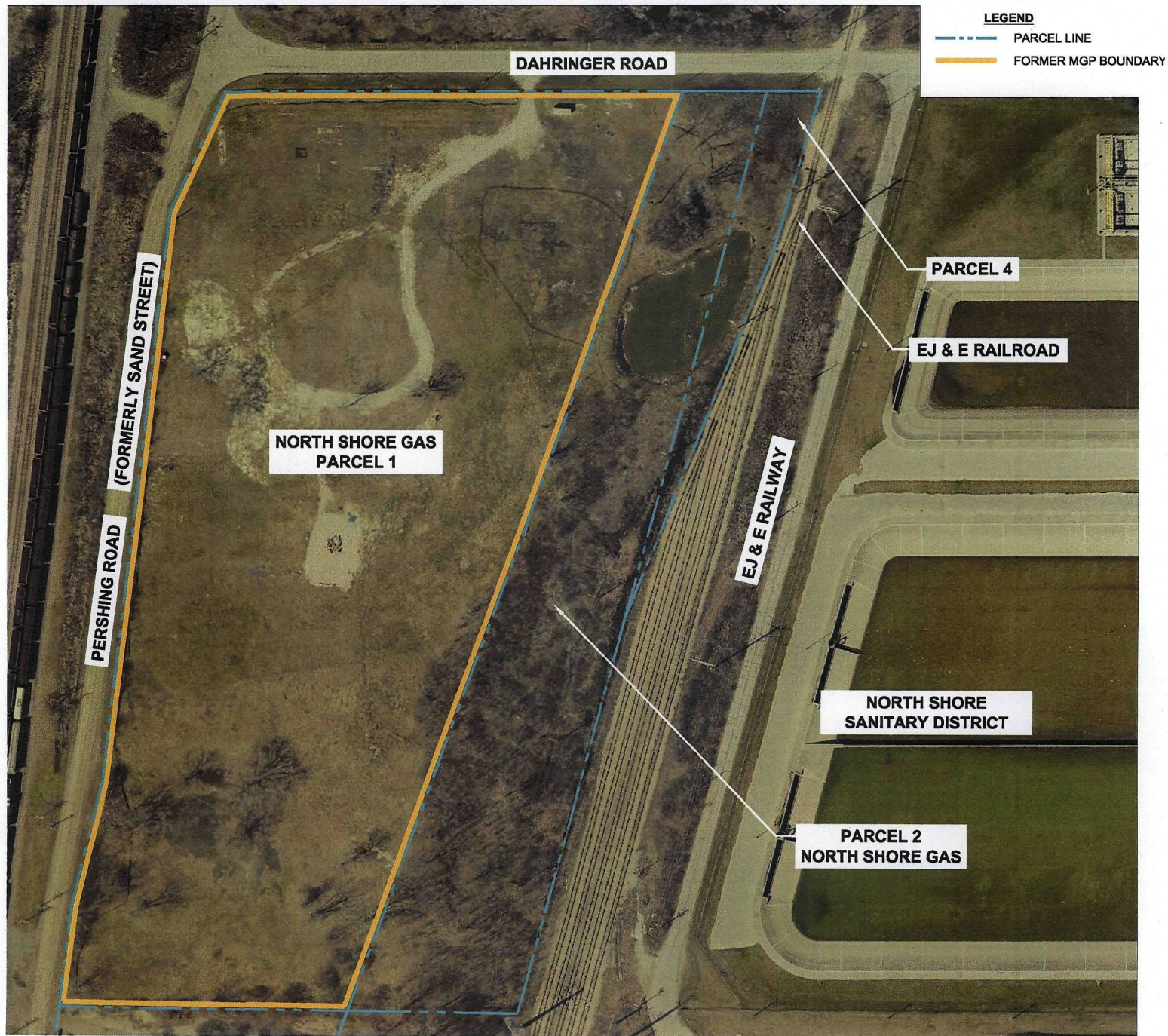
OVERVIEW

- Former MGP operated from 1912-1953
- Property comprised of 20 acres divided into 4 parcels:
 - Parcel 1: Approximately 12 acres, owned by NSG, contained the MGP structures, now vacant
 - Parcel 2: Approximately 4 acres, owned by NSG, contains most of the Waukegan Tar Pit (not part of the former MGP)
 - Parcel 3: Approximately 4 acres, owned by the City of Waukegan, currently used for composting landscaping waste (no known MGP operations)
 - Parcel 4: Less than 1 acre, owned by EJ&E Railroad, contains remainder of the Waukegan Tar Pit (not part of the former MGP)

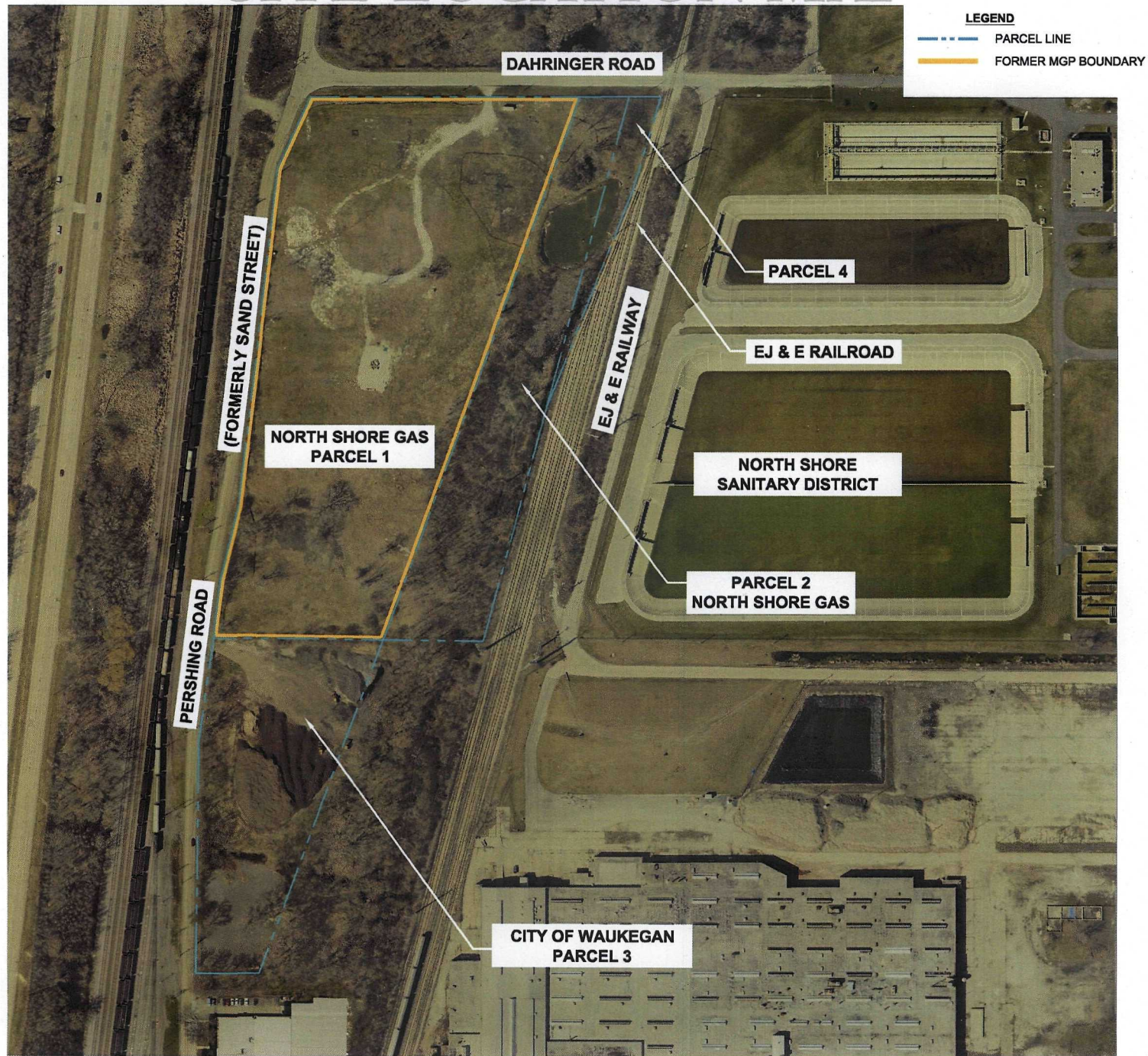
OVERVIEW (continued)

- The MGP operated on Parcel 1
- Lake Michigan lies approximately 3,200 feet east of the former MGP
- North Shore Sanitary District water treatment plant and EJ&E Railroad tracks lie directly to the east

ENLARGED SITE LOCATION MAP



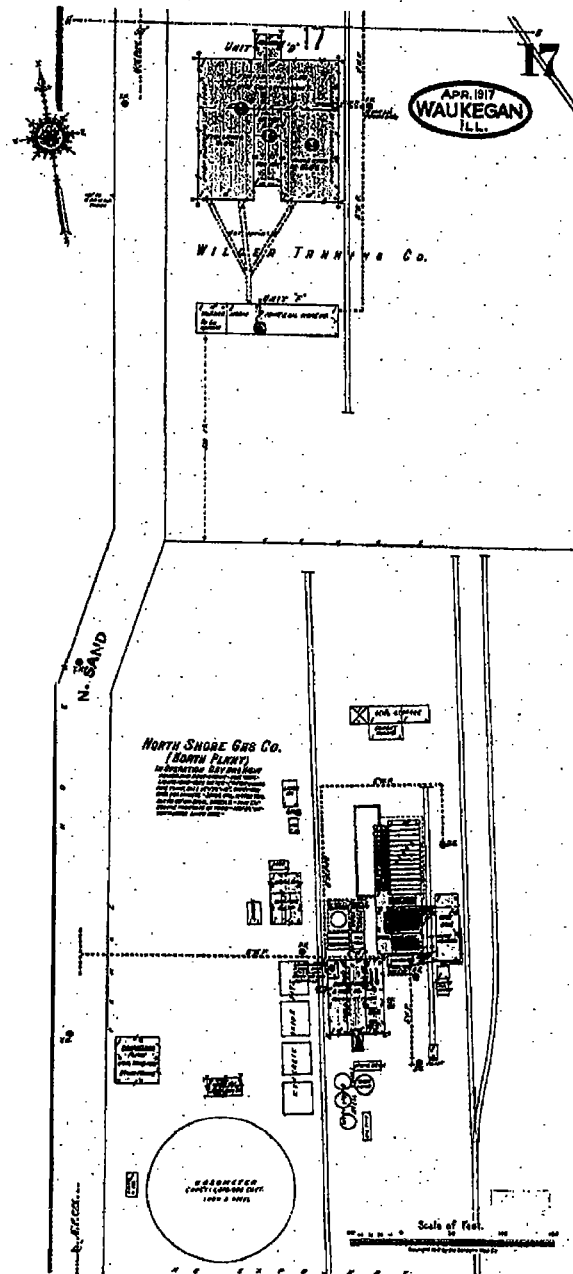
SITE LOCATION MAP



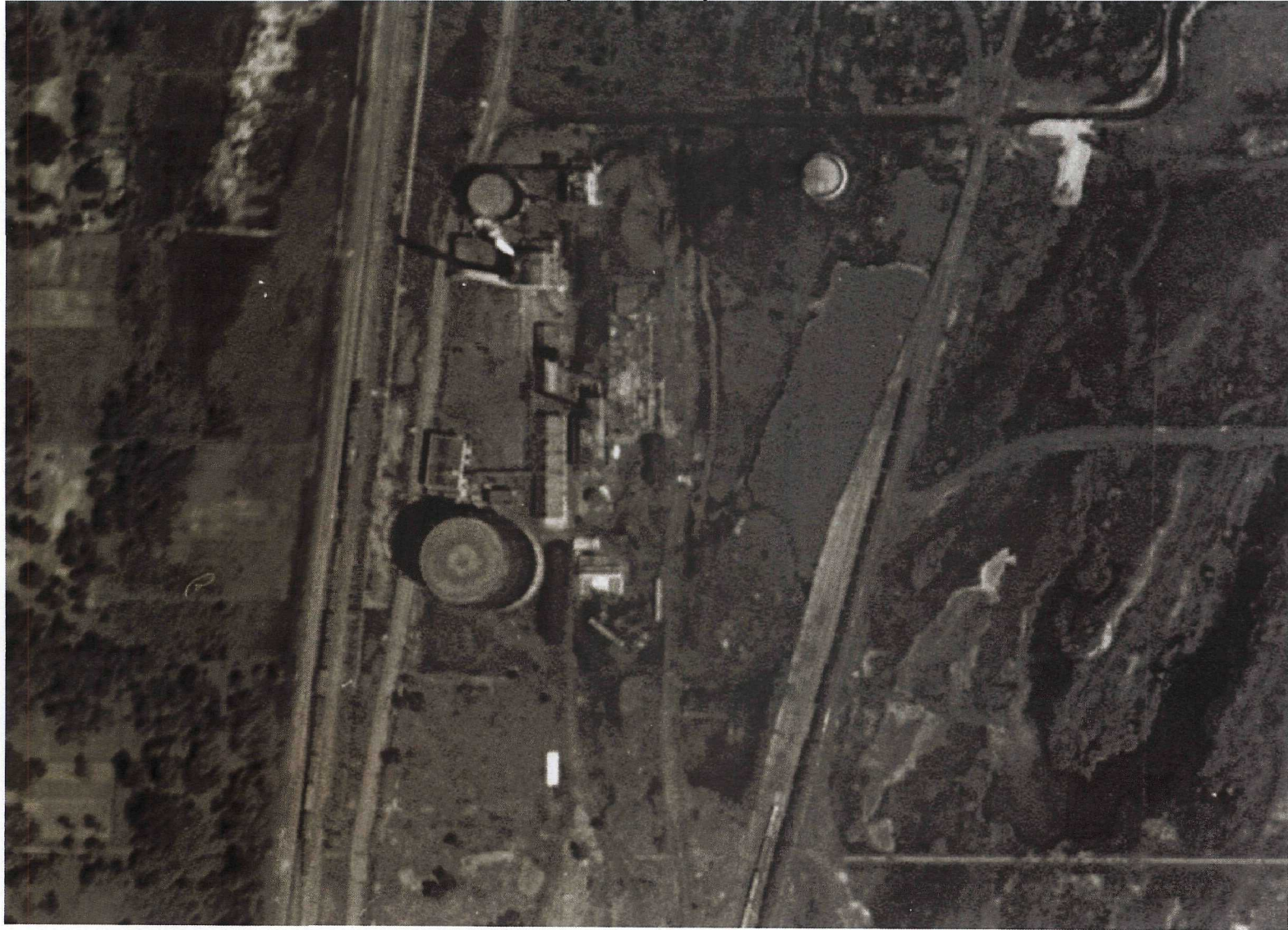
MGP HISTORY

- Coal carbonization, carbureted water gas and oil gas processes historically conducted on Parcel 1.
- Parcel 1 structures included two gas holders, tar wells, tar pit, oil tanks, purifiers, purifier house, compressor house, storage areas, and retorts.
- Property was used as a propane-air distribution facility from 1953 - 1965.
- MGP structures were completely dismantled by 1968.
- No MGP structures were on Parcels 2, 3 and 4.

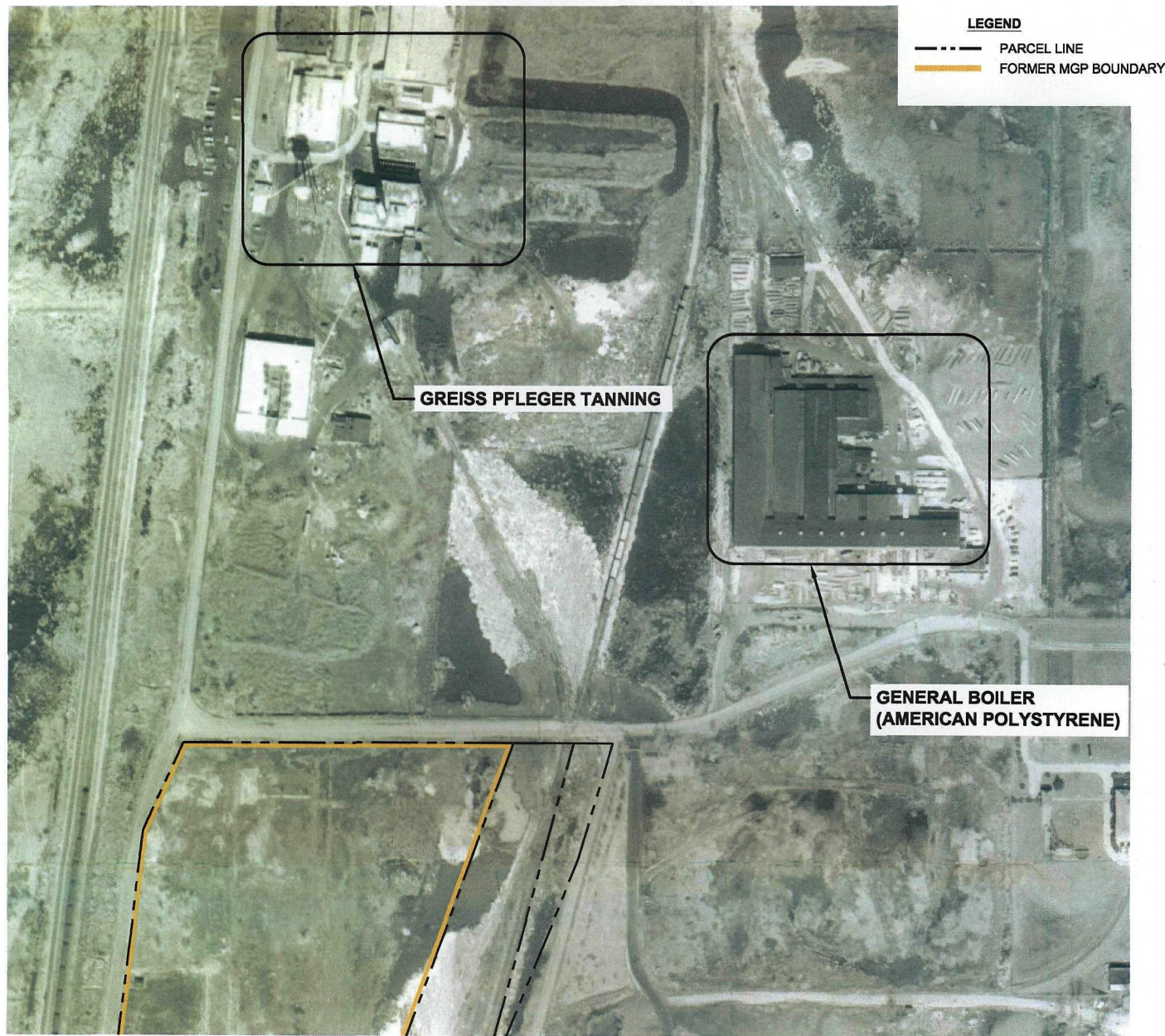
HISTORIC SANBORN MAP (1917)



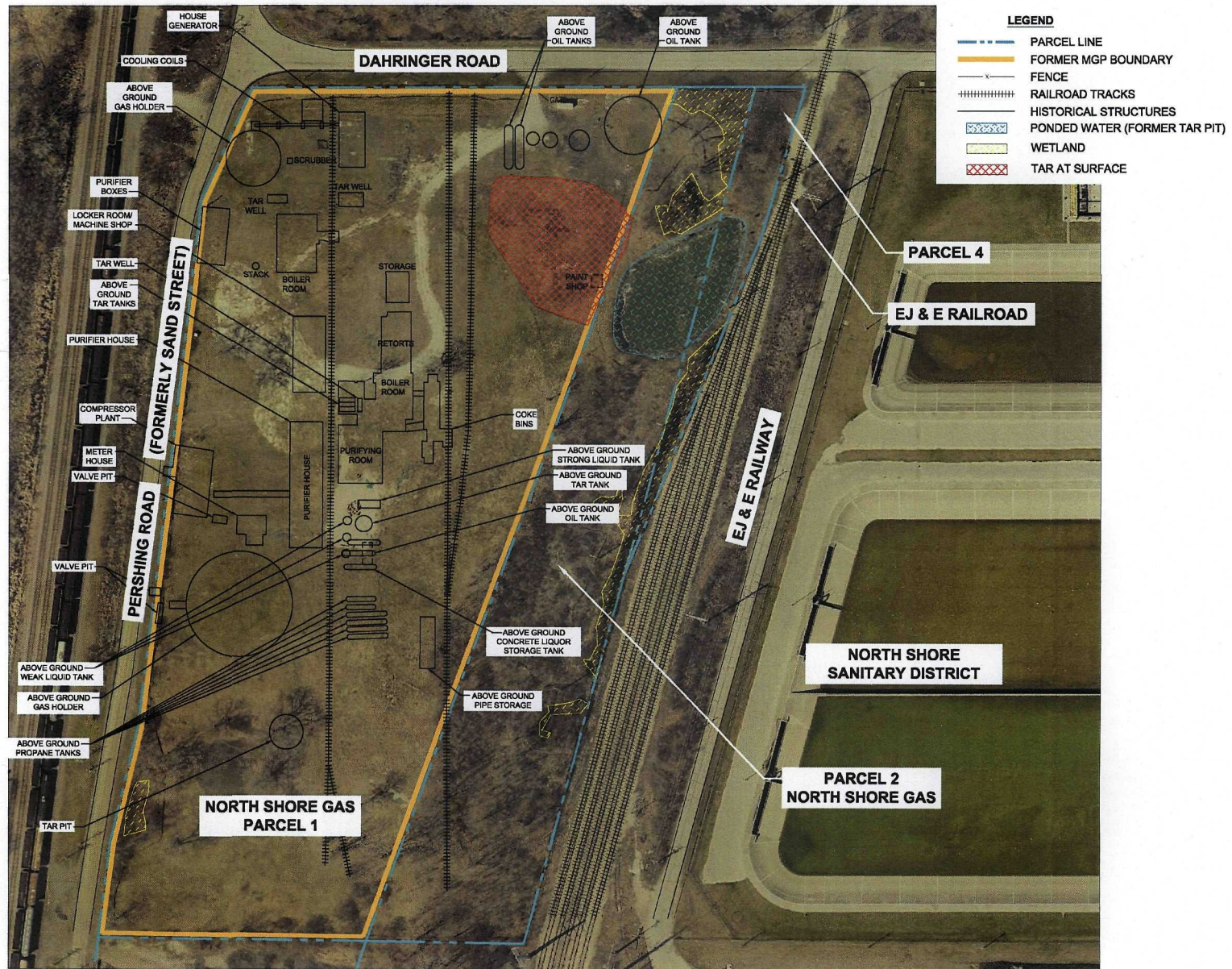
HISTORICAL AERIAL PHOTOGRAPH (1946)



HISTORICAL AERIAL PHOTOGRAPH (1970)



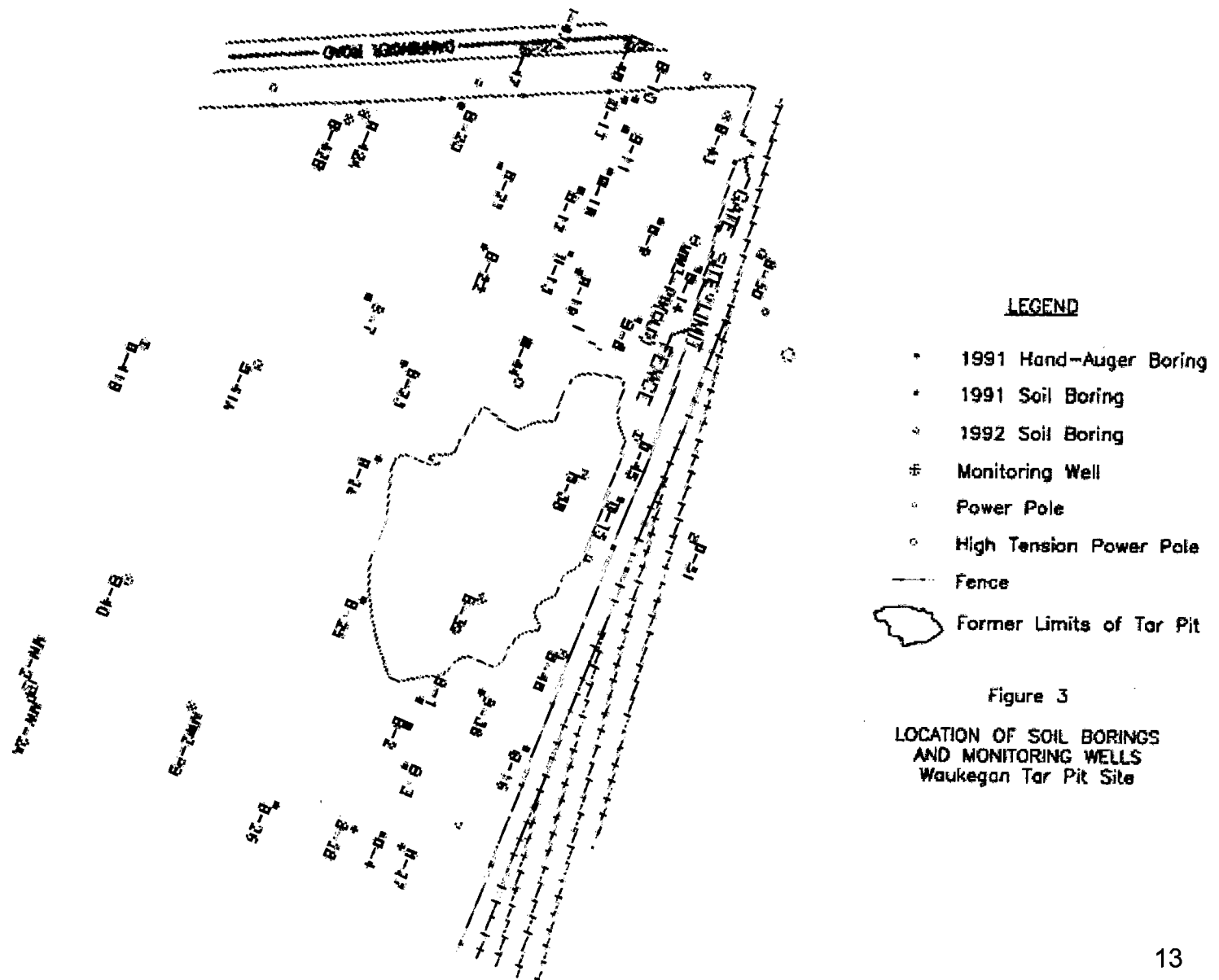
SITE LAYOUT WITH HISTORICAL STRUCTURES



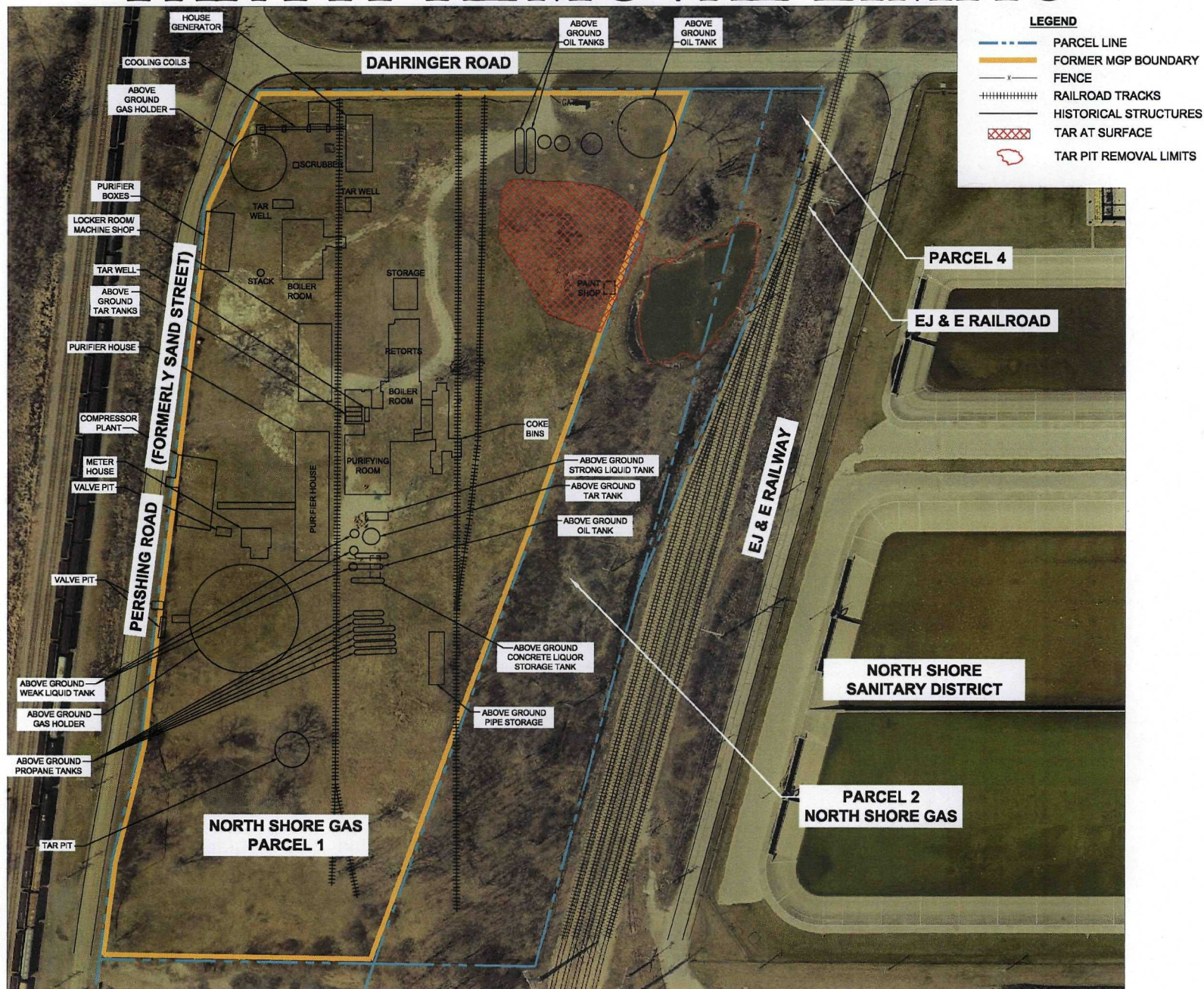
WORK PERFORMED UNDER A UNILATERAL ADMINISTRATIVE ORDER PURSUANT TO SECTION 106 OF CERCLA

- CERCLA Preliminary Assessment - Barr (1991)
- Tar Pit Removal Action (1992)
- Final Report 1 – Barr (Tar Pit Removal Action 1992)
- Final Report and Supplemental Extent of Contamination Study – Barr (1994)

TAR PIT REMOVAL LIMITS



TAR PIT REMOVAL LIMITS



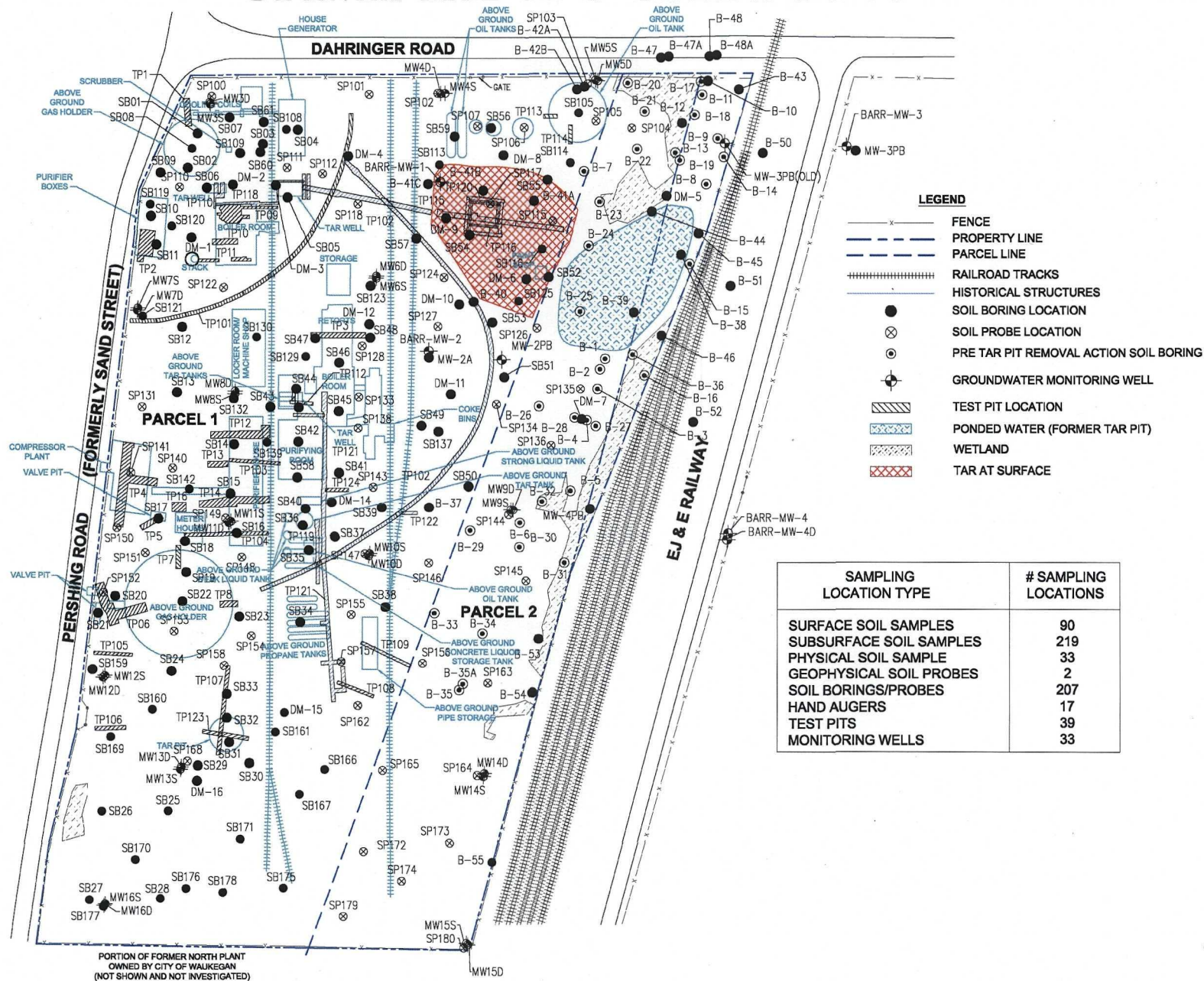
TAR PIT REMOVAL

- Approximately 1,942 tons of tar and debris excavated and disposed of off site
- Prior to backfill, 2 borings advanced in tar pit following excavation
- Tar observed in both borings
- Excavation backfilled with compacted clay and covered with a HDPE liner
- Site referred to Illinois EPA for additional investigation

SITE INVESTIGATIONS AND REPORTS

- Dames & Moore – SI of Waukegan Tar Pit on Parcels 1 and 2 (1995)
- BMcD – Site Investigation on Parcel 1 (2002)
- BMcD – Interim Remedial Action Plan (2002)
- BMcD – Wetland Determination Report and Floristic Quality Assessment (2003)
- BMcD – Comprehensive Site Investigation for Parcels 1 and 2 (2005)

SITE INVESTIGATION SAMPLE LOCATIONS



SITE INVESTIGATION FINDINGS

Tar was identified in four areas of Parcels 1, 2 and 4:

1. Northeast area near and including Waukegan Tar Pit
2. Eastern and southern area near EJ&E railroad tracks
3. Northwest area (aboveground gas holder, tar wells and generator house)
4. Central area (purifying room, purifier house, aboveground tar tank and coke bins)

SITE INVESTIGATION FINDINGS

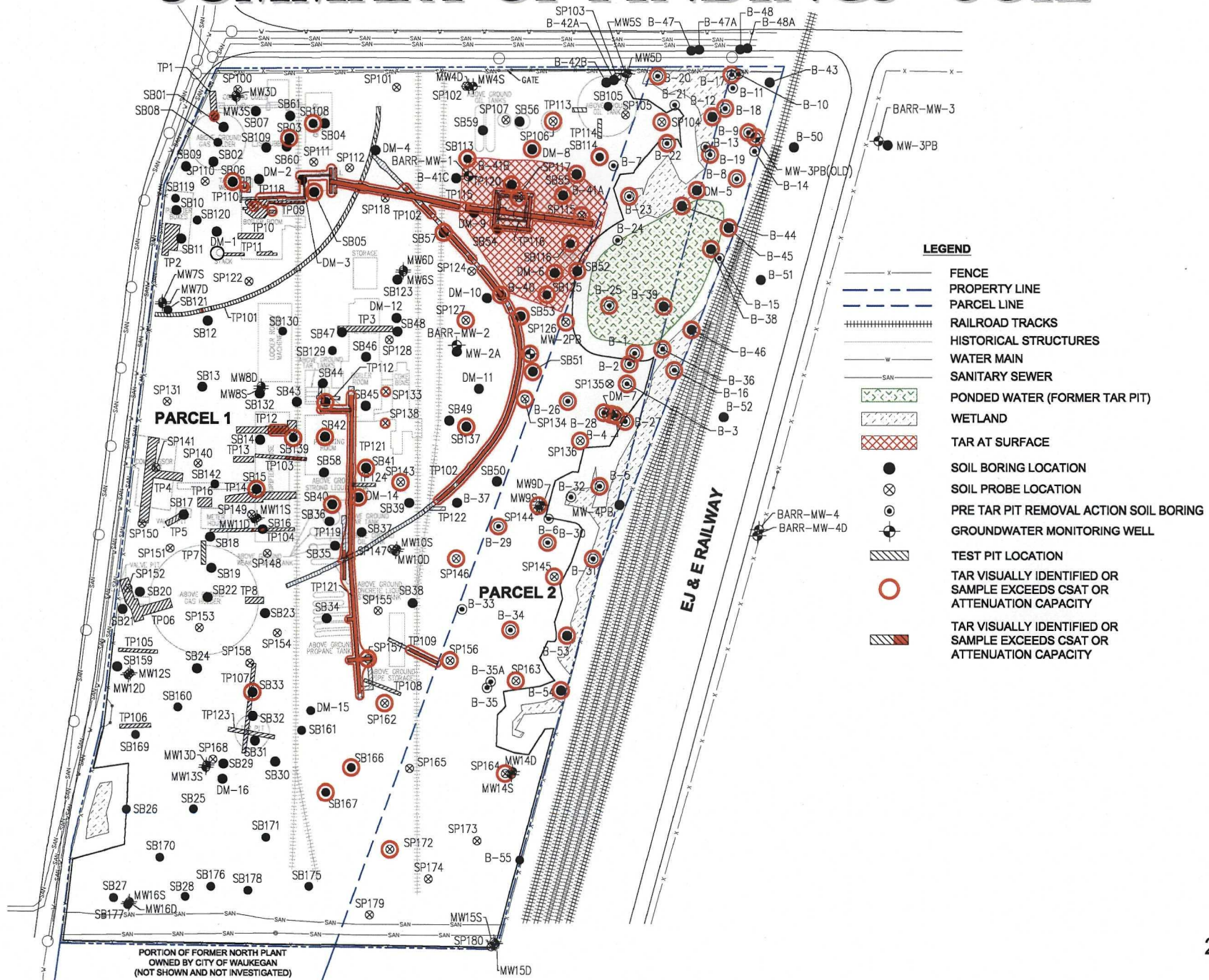
(continued)

- Groundwater sample results
 - MCL exceedances (and/or Illinois EPA TACO Tier 1 Class I Groundwater ROs) for BTEX, PAHs and lead in samples from western, southern and central wells
 - Tar was observed in bottom of one monitoring well (MW9S)
 - MCL exceedances for chromium, arsenic and vinyl chloride were identified in northeast wells and down gradient from the MGP

SITE INVESTIGATION FINDINGS (continued)

- Borings advanced on Parcels 1, 2 and 4 by Barr, Dames & Moore and BMcD confirm presence of fill and native material impacted with tar, BTEX, PAHs and metals
- Geology consists of fill and sand lying on top of a clay confining layer approximately 18 to 29 feet bgs
- Average depth to groundwater is 6 feet bgs

SUMMARY OF FINDINGS - SOIL

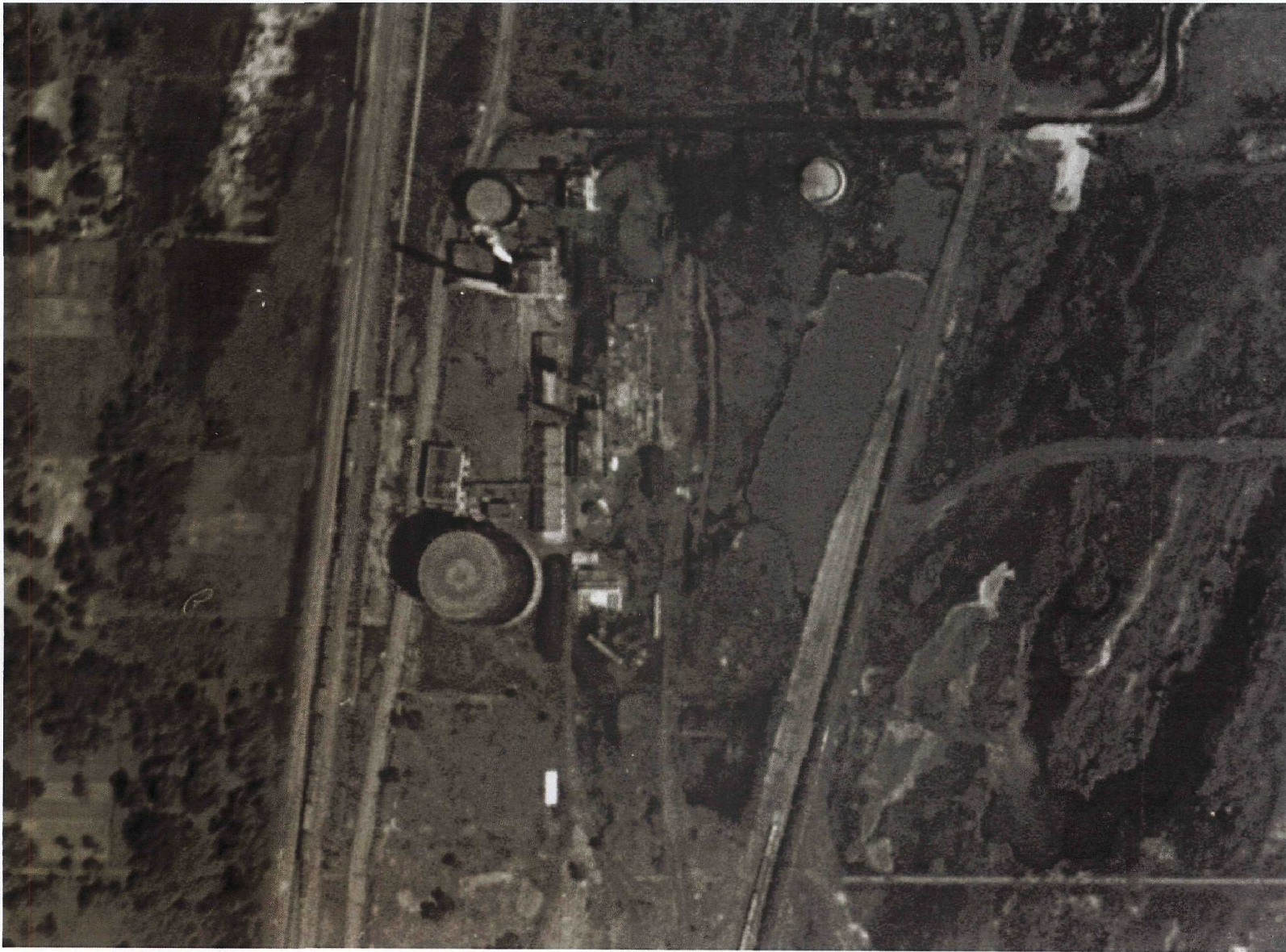


A photograph showing a large, dark, irregularly shaped object, possibly a piece of machinery or debris, lying on a ground covered in dark, loose soil or gravel. A yellow date stamp '09/15/2004' is visible in the bottom right corner.

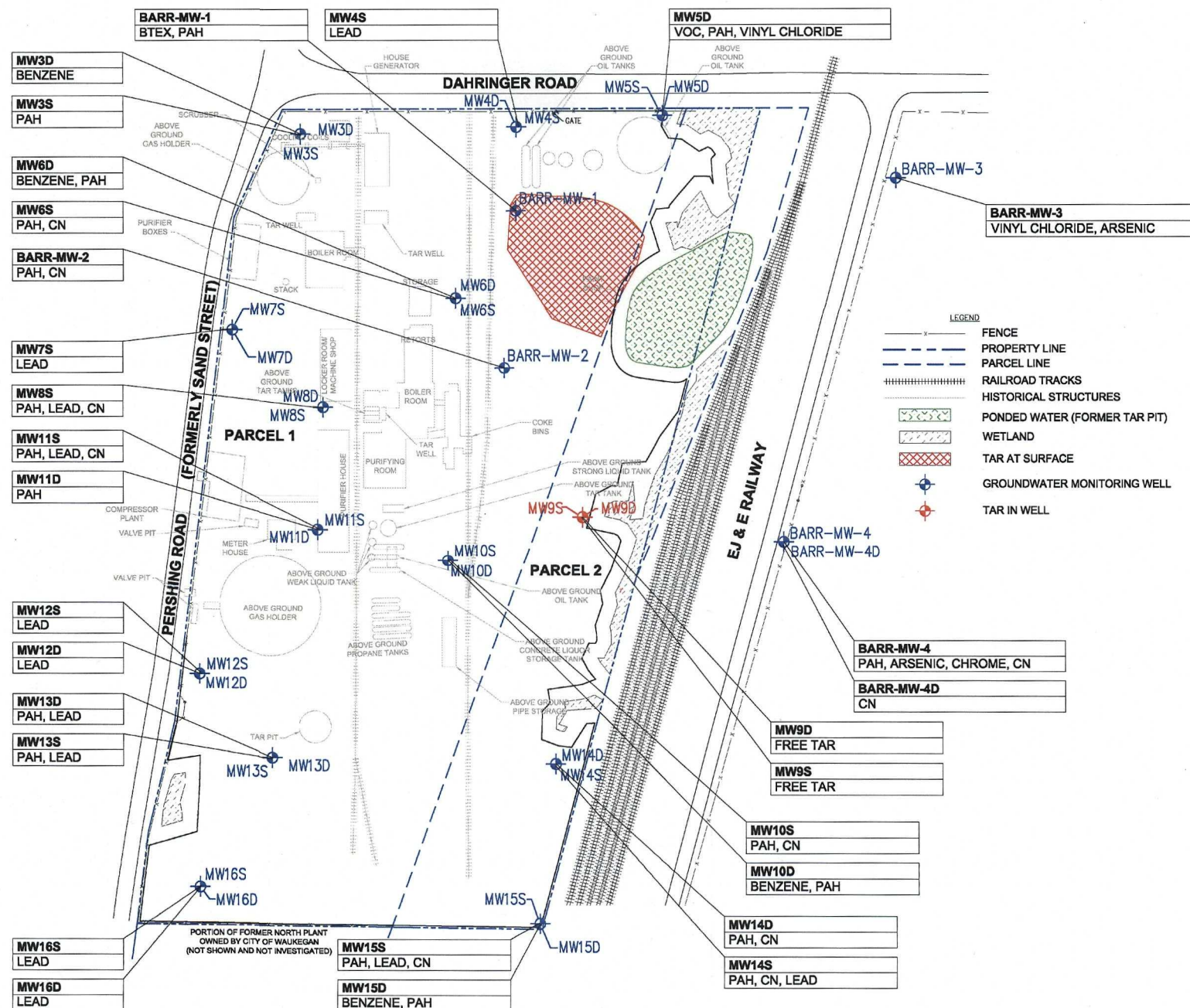


SUMMARY OF FINDINGS – SOIL

1946 Aerial

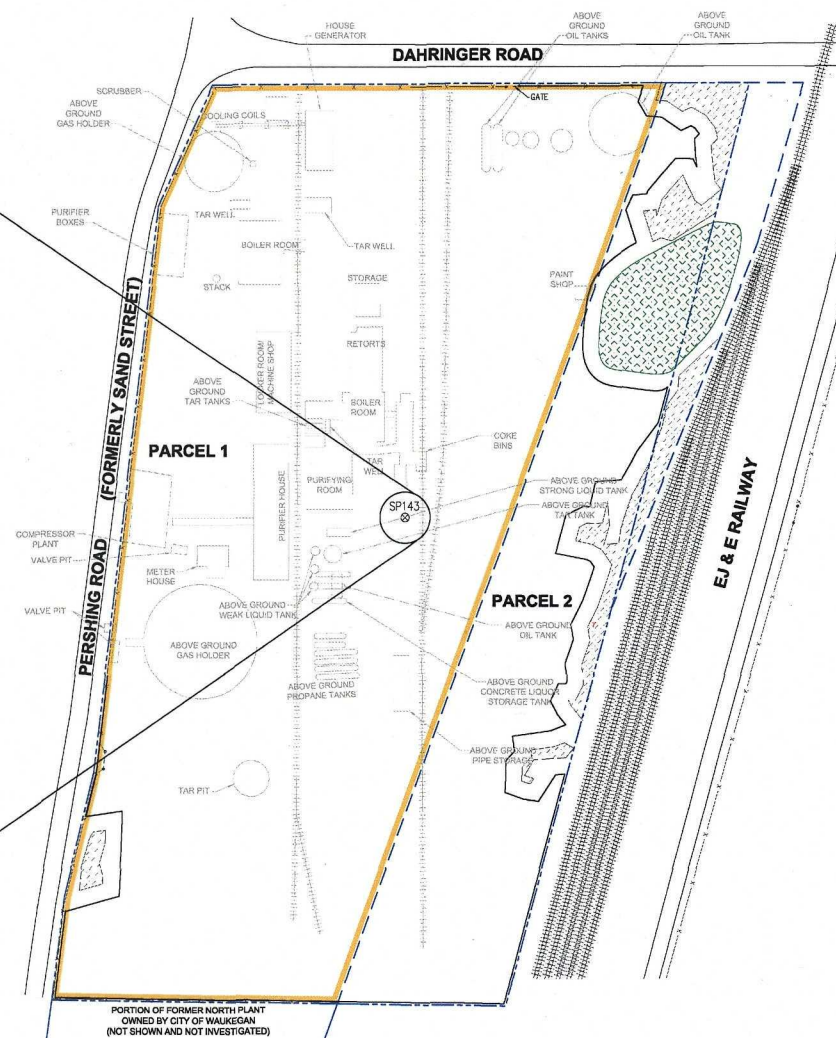


SUMMARY OF FINDINGS - GROUNDWATER

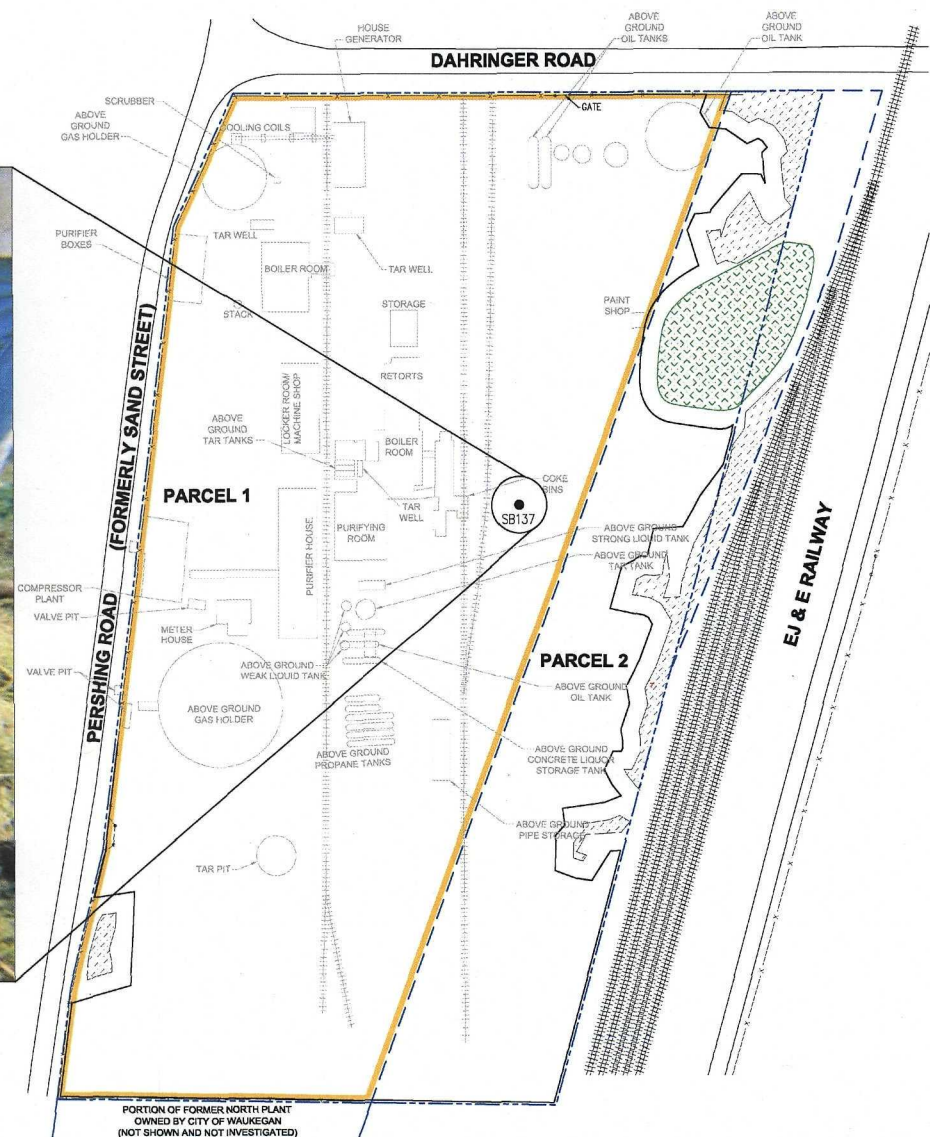


TAR SATURATED SOIL FROM SP143

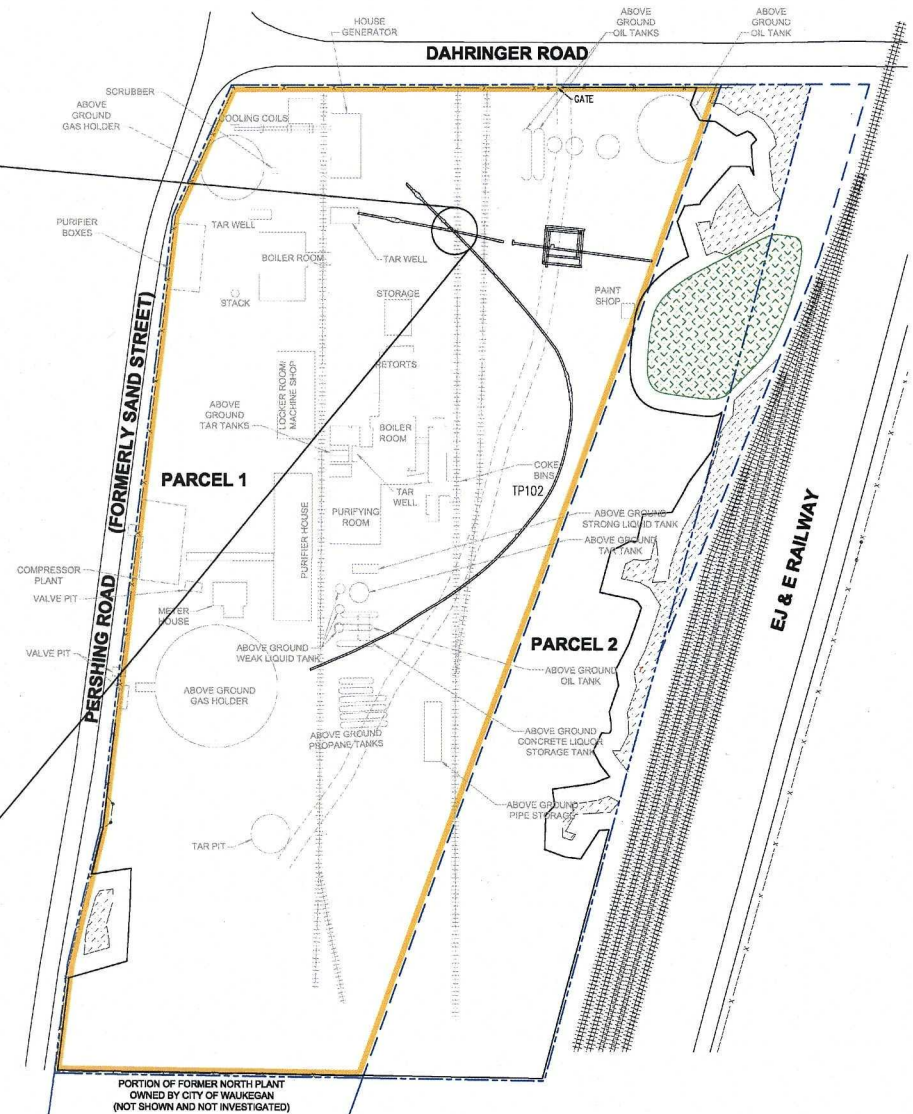
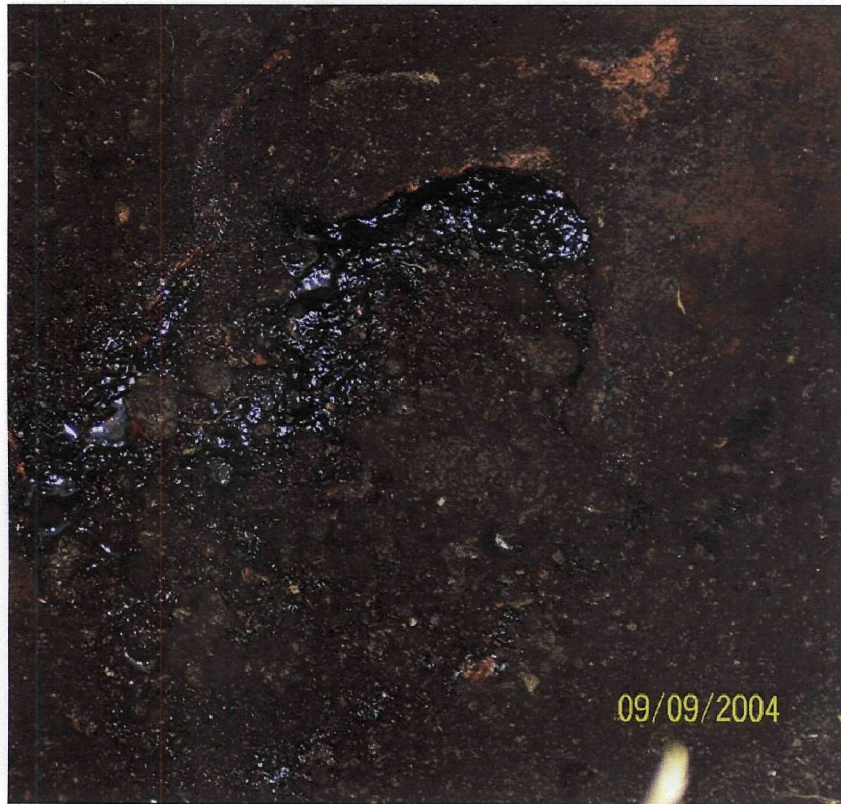
20-25' BGS



SOIL CUTTINGS FROM SB137



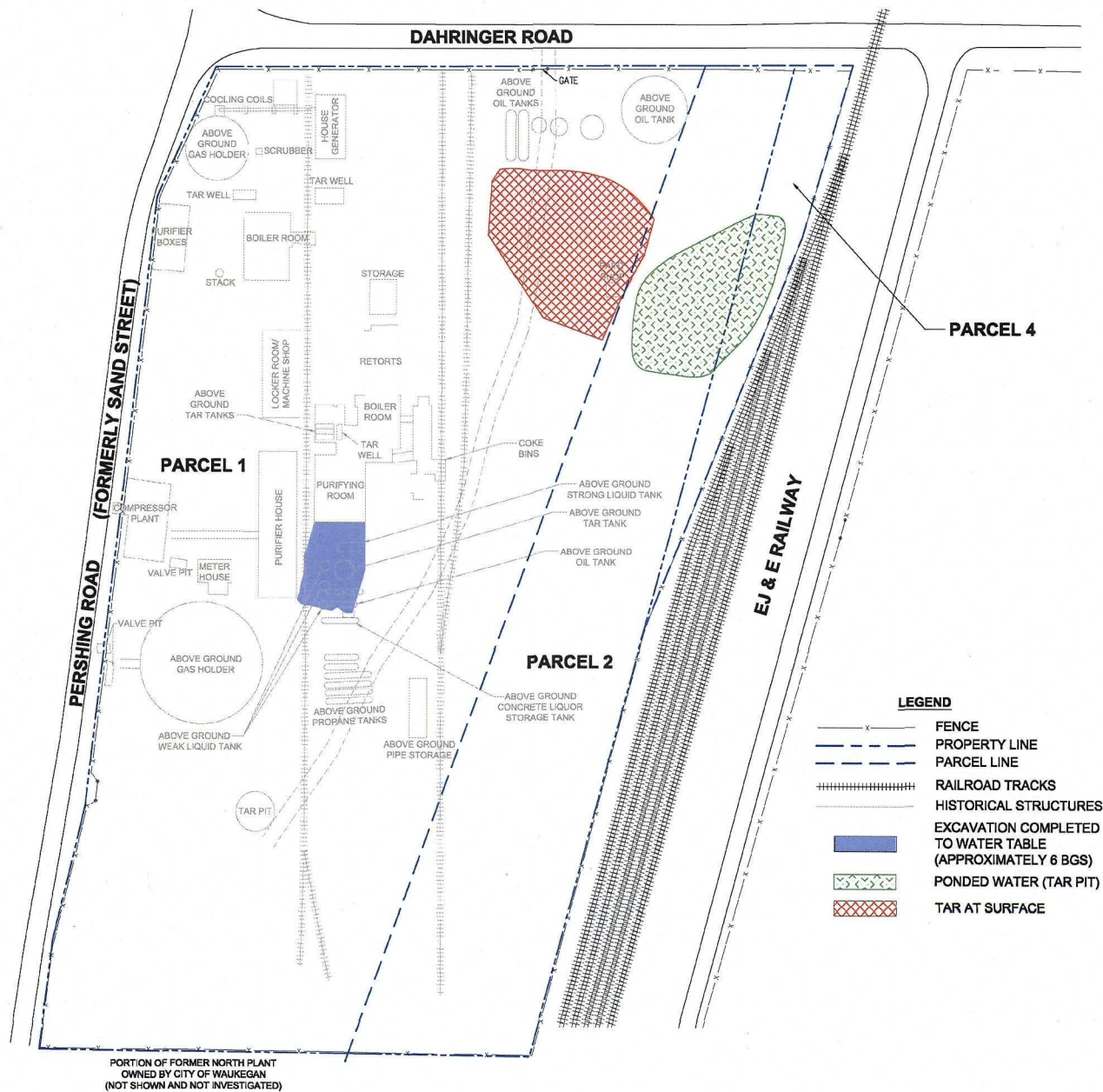
8-INCH DIAMETER CLAY PIPE IN TP102



REMOVAL AND INTERIM REMEDIAL ACTION

- February 2003 - Excavation conducted in the central portion of the facility to the water table (approximately 6 feet bgs)
- Approximately 1,700 tons of non-hazardous special waste was generated
- Excavation backfilled with imported granular materials

REMOVAL AND INTERIM REMEDIAL ACTION



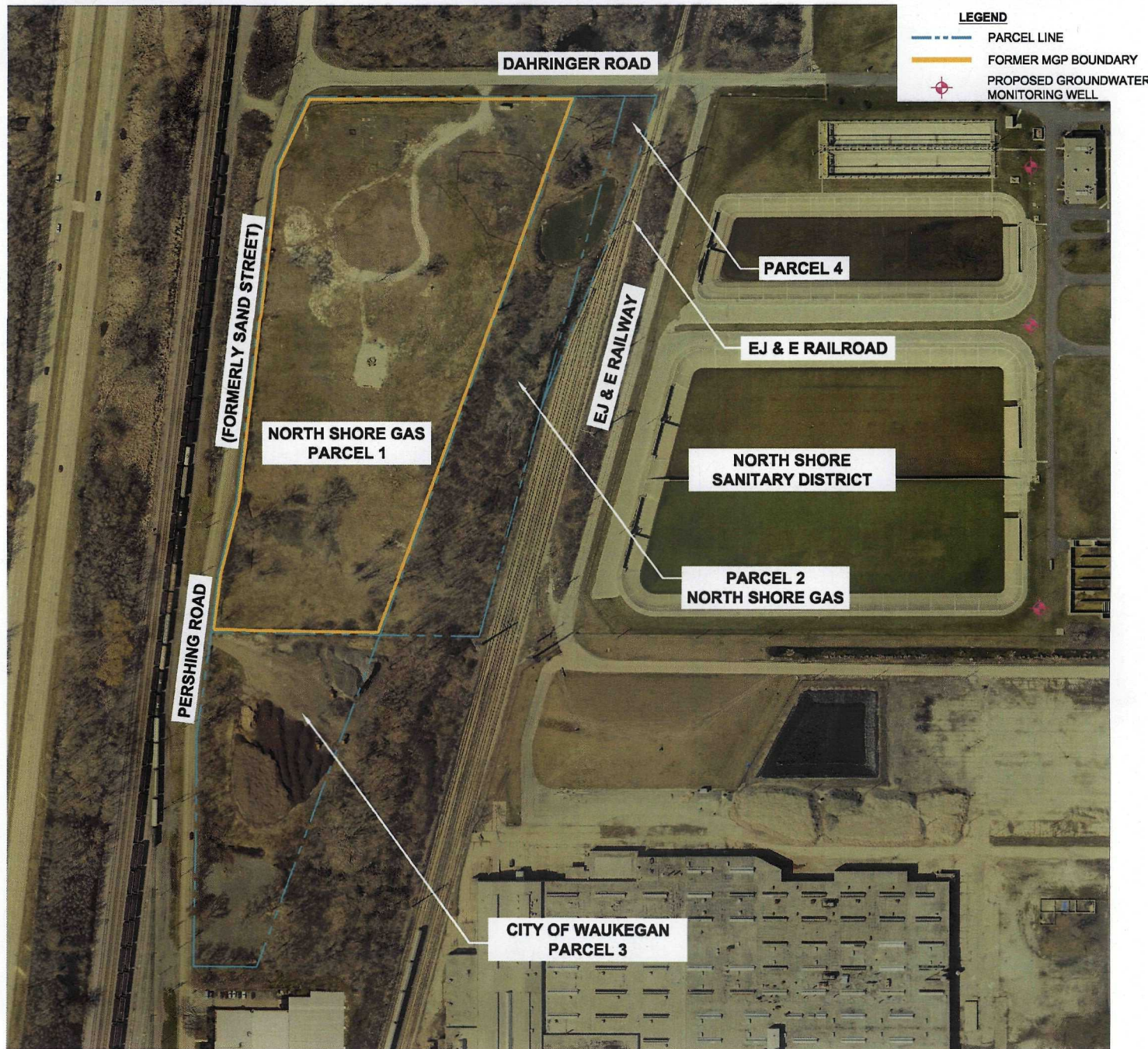
EXCAVATION OUTSIDE ABOVE GROUND TAR TANK



TAR AND WEAK LIQUID ABOVEGROUND TANKS



PROPOSED NEXT STEPS - CONTINGENCY



The map illustrates the Kalamazoo River Superfund Site, showing a grid of monitoring wells (MW) and various industrial structures. The site is bounded by Dahring Road to the north and Pershing Road to the west. Key features include:

- Monitoring Wells:** Labeled with codes such as MW3D, MW3S, MW4D, MW4S, MW5S, MW5D, MW6D, MW6S, MW7S, MW7D, MW8D, MW8S, MW9S, MW10S, MW10D, MW11S, MW11D, MW12S, MW12D, MW13S, MW13D, MW14S, MW14D, MW15S, MW15D, MW16S, and MW16D.
- Buildings and Structures:** Includes boiler rooms, storage areas, retorts, a purifying room, coke bins, and a locker room/machine shop.
- Infrastructure:** Dahring Road and Pershing Road are shown. Barr-MW-3, Barr-MW-4, and Barr-MW-4D are also indicated.
- Legend:** Symbols represent different types of above-ground storage tanks and structures:
 - Green cross-hatch: Above ground strong liquid tank
 - Blue cross-hatch: Above ground tar tank
 - Red cross-hatch: Above ground oil tank
 - White cross-hatch: Above ground concrete liquor storage tank
 - Blue cross-hatch: Above ground propane tanks

